

# SPIO 20 downlight

trimless

048-1710510F 048-1698107 002-90783



Project / Type

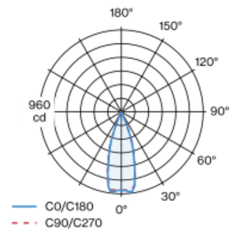
Notes

Count / Date

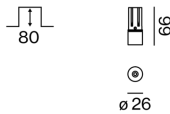


Round recessed spotlight in aluminium; surface traffic white powder coated; installation without tools in mounting set due to patented ball catch system; for trimless installation in plasterboard ceilings, specially designed trim with grooves for better adhesion of smoothing compound; suitable for ceiling thickness of 9-25 mm; special mounting tool for easy installation of the trimless housing available as an accessory; paintable light inset; shadow joint between light inset and mounting set optionally fillable; passive cooling of the LEDs through improved heat sink geometry; light colour 3000 K; binning initial MacAdam  $\leq 3$  SDCM; CRI  $\geq 90$ ; min. 85% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; incl. high quality lens system; precise radiation characteristic with 34° beam; no multiple shadows; uncluttered ceiling look through recessed lighting level; reduced light-emitting surface (only  $\varnothing 10$  mm); degree of protection IP20; PC2; 220-240 V; incl. converter, non dimmable; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

## Light distribution



## Product drawing



## General

Ceiling | Recessed

rotation 360°

traffic white | RAL 9016 <sup>1</sup>

traffic white

IP20

296 lm

fixture 45 lm/W <sup>2</sup>

## LED

3000 K

CRI  $\geq 90$

L85 / 50000 h

initial MacAdam  $\leq 3$  SDCM

R<sub>g</sub>: 104 | R<sub>f</sub>: 91 | R<sub>f(1-5)</sub>: 93

MR 0.59 | MDER 0.54

## Optical

flood | beam angle 34°

UGR  $\leq 10$

PstLM  $\leq 1.0$  <sup>3</sup> | SVM  $\leq 0.4$  <sup>3</sup>

## Electrical

non DIM

PC2 | 220-240 V

system 8.7 W | fixture 6.5 W

12 Vf | 600 mA

## Physical

trimless

diameter 26 mm | height 66 mm

0.24 kg

## Cutout

diameter 48 mm

min. ceiling thickness 9 mm | max. ceiling thickness 25 mm

recessed depth 80 mm

<sup>1</sup> RAL code  
<sup>2</sup> incl. consideration of optical losses & internal control unit losses  
<sup>3</sup> Value of containing product at full load (undimmed)

## Installation instructions



## Lighting calculator



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## Maintenance Factors

Operating Time [h]	10 000	20 000	30 000	40 000	50 000
LLMF	1	1	0.99	0.97	0.96
LSF	1	1	1	1	1
MF	LMF × RSMF × LLMF × LSF		RSMF <sup>a</sup>	Room Surface Maintenance Factor	
MF	Maintenance Factor		LLMF	Lamp Lumens Maintenance Factor	
LMF <sup>a</sup>	Luminaire Maintenance Factor		LSF	Lamp Survival Factor	

<sup>a</sup> According to "CIE 97, Maintenance of indoor electric lighting systems", 2005, ISBN 3-900-734-34-8. The values must be determined by the planner.

## Circuit Breaker Types

Automatic Circuit Breaker Type	Number of Fixtures
B10	31
B13	40
B16	50
B20	62
C10	52
C13	67
C16	85
C20	104

## Components

### MOUNTING SET trimless

TYPE	COLOUR	Ø (MM)	ARTICLE NUMBER(S)
for plasterboard ceilings	traffic white	56	048-1698107



### POWER SUPPLY

L-W-H (MM)	ARTICLE NUMBER(S)
147-44-22	002-90783



## Mounting accessories

### SPECIAL MOUNTING TOOL

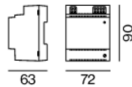
TYPE	Ø (MM)	ARTICLE NUMBER(S)
necessary to install mounting housing trimless	83	063-8911110



## Optional electrical accessories

### DIN RAIL POWER SUPPLY

L-W-H (MM)	ARTICLE NUMBER(S)
72-90-63	005-6520210



### DIN RAIL LED DRIVER

TYPE	L-W-H (MM)	ARTICLE NUMBER(S)
2 × 42W   48V DC   UOUT 10–40 V	36-88-59	005-6121030

